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#### **FOREWORD**

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N/A In the conduct of research involving hazardous organisms, the investigator(s) adhered to the CDC-NIH Guide for Biosafety in Microbiological and Biomedical Laboratories.

Jeffrey D. Laksin, Ph.D.

## Advances in the Biology and Treatment of the Skin

## Rutgers University Busch Campus, Piscataway, NJ (June 23 - 25, 1999)

### SESSIONS I & 2: SKIN SCIENCE ~ NEW TECHNOLOGIES, NEW INSIGHTS

2:20 p.m.

 $2:45 \sim 3:10 \text{ p.m.}$ 

SESSIONS I & 2: SKI	IN SCIENCE ~ NEW TECHNO	LOGIES, NEW INSIGHTS		
Wednesday, June 2	3			
8:20 ~ 8:30 am	Welcome Remarks & I	ntroduction Jeffre	ey D. Laskin, Ph.D.	
	SESSIONS 1 & 2:	Skin Science: New Techn	ologies, New Insights	v , क्राक्ट-क
	SESSION I: Moderator:	Diane E. Heck, Ph.D.		
8:30 a.m.	Transgenic Models fo John DiGiovanni, Ph	or Studying Growth Factor Sign.D.	gnaling in Mouse Skin	
8:55 a.m.	Gene Microchip Ana	lysis of Dermal Microvascula	r Endothelial Cells	
	Diane E. Heck, Ph.D.			
9:05 a.m.	Subtraction Libraries & Microarrays to Study Keratinocyte Gene Expression			
	John J. Schlager, Ph.1	D.		
9:30 a.m.	Strategies of Epithelia & Transit Am	al Repair: Differential Modula plifying Cells	ation of Stem Cells	
	Robert Lavker, Ph.D.			
9:55 ~ 10:25 a.m.	Coffee Break			
	SESSION II Moderator:	Christopher J. Molloy, Ph.D	).	y year a
10:25 a.m.	Keratinocyte Cell Cyc	cle Regulation in a Mouse Tu	mor Model	
	David K. Bol, Ph.D.		•	
10:50 a.m.	Epidermal Keratinocy Peroxisome Pr	rte Response to Natural & Syr coliferators	nthetic	
	Brian Aneskievich, Pl	h.D.		•
11:15 a.m.	Disorders in Keratins	: A Molecular Basis for Skin	Disease	
	Dennis Roop, Ph.D.			
12:05 ~ 1:30 p.m.	Lunch & Poster Sessi	on		
SESSIONS 3 & 4: THI	E BIOLOGY OF SKIN DISEASI	Ε		
	SESSION III Moder	rator: Alice B. Gottlieb, M.D.	., Ph.D.	
1:30 p.m.	An Albertian-Biologic	cal View of Irritant Dermatitis	3	
	Howard I. Maibach, N	M.D.		e
1:55 p.m.	Antigen Processing &	T-cell Function in Allergic C	Contact Dermatitis	
	Richard Kalish, M.D.			

Pathogenesis & Treatment of Cutaneous T-cell Lymphoma

Alain Rook, M.D.

Coffee Break

SESSION IV Moderator: Howard I. Maibach, M.D.

3:10 p.m. The Immunopathology of Leprosy: The Original Th1 & Thy2 Paradigm

William Levis, M.D.

3:35 p.m. Psoriasis: The Model for Th1-type Immune Disorders

Alice B. Gottlieb, M.D., Ph.D.

4:00 p.m. Pemphigus: Skin Failure Due to Loss of Cell Adhesion

John R. Stanley, M.D.

4:25 p.m. A Fully Human Anti-IL-8 Antibody in the Treatment of Psoriasis

Gerald Krueger, M.D.

 $4:35 \sim 6:00 \text{ p.m.}$  Posters & Reception

#### Thursday, June 24

#### SESSIONS 5 & 6: CANCER ~ PHOTOBIOLOGY

SESSION V Moderator: Allan H. Conney, Ph.D.

8:30 a.m. Photocarcinogenesis in Ornithine Decarboxylase Transgenic Mice

Hasan Mukhtar, Ph.D.

8:55 a.m. Aberrant Cell Cycle Regulation in Melanoma

Ruth Halaban, Ph.D.

9:20 a.m. The Role of Protein Kinase C in the Development of Malignant Melanoma

Susan Rotenberg, Ph.D.

9:55 a.m. Ornithine Decarboxylase, Keratinocyte Growth Regulation & Skin Cancer

Susan Gilmour, Ph.D.

10:20 ~ 10:40 a.m. Coffee Break

SESSION VI Moderator: Jeffrey D. Laskin, Ph.D.

10:40 a.m. State of the Art of Photoprotection

Prof. Dr. rer. Nat. Hans Schaefer

11:05 a.m. Toxicity of Chronically Applied Chemicals & Some Similarities to Photodamage

Lorraine H. Kligman, Ph.D.

11:25 a.m. Psoralen Photobiology, Psoriasis, PUVA & Skin Cancer, Genotoxic or Immunotoxic?

Suggestions from Molecular Epidemiology

Frank Gasparro, Ph.D.

11:50 a.m. UV-Induced MMP-1 Production ~ An In vitro Model for Assessing Photoprotection

10 mm

Stan Shapiro, Ph.D.

12:15 ~ 1:30 p.m. Lunch & Posters

## Sessions 7 & 8: Redox Regulation, Oxidative Stress & Antioxidants $\,$ in the Skin $\sim$

### PHOTOAGING & PHOTODAMAGE

SESSION VII Moderator: Edward J. Yurkow, Ph.D.

1:30 p.m. Redox Status of the Skin

Edward Yurkow, Ph.D.

1:45 p.m	l <b>.</b>	Nitric Oxide and Skin Inflammation
		Jeffrey D. Laskin, Ph.D.
1:55 p.m	ı <b>.</b>	Site-specific Oxidative Stress in Keratinocyte Phospholipids:
		A Signaling Pathway in Apoptosis
		Valerian E. Kagan, Ph.D.
2:20 p.m	<b>l.</b>	Coenzyme Q10, A Cutaneous Antioxidant & Energizer
		Udo Hoppe, M.D.
2:45 p.m	ı.	High Strength Tretinoin Treatment of Photoaged Skin
		Douglas Kligman, M.D., Ph.D.
3:10 ~ 3	:30 p.m.	Coffee Break
		SESSION VIII Moderator: Diane E. Heck, Ph.D.
3:30 p.m	ı.	Drugs, Cosmetics & the Skin ~ An Appraisal of Albert Kligman's Ideas
		Myra Barker, Ph.D.
3:55 p.m	l.	Identifying Natural Products with Anti-Inflammatory Activity
		Katharine Martin, Ph.D.
4:05 p.m	l <b>.</b>	Anti-oxidant Inhibition of Photodamage: A Clinical Evaluation
		Daniel Maes, Ph.D.
4:15 p.m	i.	Genistein, A Novel Chemical for the Prevention of Skin Cancers & Photodamage
		Mark Lebwohl, M.D.
4:40 p.m	•	Mechanisms of Photoaging & Prevention by Retinoids
		John Voorhees, M.D.
5:30 ~ 6:	30 p.m.	Reception & Poster Session
7:00 ~ 9:	30 p.m.	Banquet Dinner in honor of Dr. Albert Kligman

. 10000.

## Friday, June 25

## SESSIONS 9 & 10: HAIR, MODELS & MECHANISMS ~ BASEMENT MEMBRANE - CUTANEOUS PHARMACOLOGY

8:30 a.m.	SESSION IX Moderators: T-T Sun, Ph.D. and Donald Gerecke, Ph.D.  Role of the Sulfotransferase Gene Family in Hair Growth Regulation
	& Skin Differentiation
	Thomas P. Dooley, Ph.D.
8:55 a.m.	The Dermal-Epidermal Junction
	Robert Burgeson, Ph.D.
9:20 a.m.	Molecular Aspects of Inherited Alopecias
	Angela M. Christiano, Ph.D.
$9:45 \sim 10:15 \text{ a.m.}$	Coffee Break
10.15	
10:15 a.m.	Molecular Genetics of Cutaneous Basement Membrane Zone
	Jouni Uitto, M.D., Ph.D.
	SESSION X Moderator: Joel Zatz, Ph.D.
10.40	•
10:40 a.m.	Advances in the Science of Percutaneous Absorption
	Thomas Franz, M.D.
11:05 a.m.	Perspectives on Hydroxyacids

11:30 a.m.

An overview of the mechanism of action of retinoid related molecules

Braham Shroot, Ph.D.

11:55 ~ 1:30

Lunch and Poster Session

### SESSIONS 10 & 11: COSMETICS ~ PHARMACEUTICS: THE FADING BARRIER

	SESSION XI Moderator: Jules Mitchell, Ph.D.		
1:30 p.m.	Evaluating the Role of Antibiotics in Skin Therapy		
	Otto Mills, Ph.D.		
1:55 p.m.	Clinical Drug Evaluation		
	Jules T. Mitchel, Ph.D.		
2:20 p.m.	Regulatory Considerations for Retin-A Creams		
	Kim Spear, M.D.		
2:30 p.m.	Efficacy of Cosmetic Retinol Formulations in Aging Skin		
	Sergio Nacht, Ph.D.		
2:55 ~ 3:20 p.m.	Coffee Break		
3:20 p.m.	Advances in Photodiagnostics		
	Prof Dr. Med Percy Lehmann		
3:45 p.m.	"Keynote Address"		
	Sensitive Skin ~ The Interface Between Dermatology & Cosmetology		
	Albert Kligman, M.D., Ph.D.		
4:15 p.m.	Closing Comments		
	Howard I. Maibach, M.D.		

# FACULTY LIST

Brian Aneskievich, Ph.D.	
Myra Barker, Ph.D.	
David K. Bol, Ph.D.	
Robert Burgeson, Ph.D.	
Angela M. Christiano, Ph.D.	
Allan Conney, Ph.D.	
John DiGiovanni, Ph.D.	. UT MD Anderson Cancer Center
Thomas P. Dooley, Ph.D.	IntegriDerm LLC
Thomas Franz, M.D.	Connectics
Frank Gasparro, Ph.D.	Thomas Jefferson U.
Donald Gerecke, Ph.D.	Rutgers U.
Susan Gilmour, Ph.D.	-
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